

Amendments to the Claims

Claim 1 (Currently amended): A storm door mortise lock that prevents lockout, comprising:
a pair of side plates;
a dead bolt installed between the side plates;
a cam having a cam body and a cam arm rotatably secured between the side plates and extending into
a notch in the dead bolt wherein the cam body has first and second flat surfaces which
converge to define an over-center point;
the cam pivoting about an axis spaced from the dead bolt;
a spring installed between the side plates and outside the dead bolt, that engages the first and second
flat surface of the cam, so as to bias the dead bolt towards the locked and unlocked positions,
respectively; and
wherein the dead bolt having a stop to limit the rotation of the cam.

Claim 2 (Original): The storm door mortise lock of claim 1 wherein the spring further limits the rotation of the cam.

Claim 3 (Original): The storm door mortise lock of claim 1 wherein the cam includes a cam through hole.

Claim 4 (Original): The storm door mortise lock of claim 1 wherein the cam is actuated by a spindle rotatably secured to a separate key cylinder.

Claim 5 (Original): The storm door mortise lock of claim 1 wherein the cam is actuated by a spindle rotatably secured to a separate thumb turn button.

Claim 6 (Cancelled)

Claim 7 (Previously presented): The storm door mortise lock of claim 1 wherein the dead bolt and cam are interconnected.

Claim 8 (Cancelled).

Claim 9 (Previously presented): The storm door mortise lock of claim 1 wherein the cam has a finger extending into the dead bolt.

Claim 10 (Previously presented): The storm door mortise lock of claim 9 wherein the dead bolt has a first notch which permits unobstructed rotation of the cam.

Claim 11 (Cancelled)

Claim 12 (Previously presented): The storm door mortise lock of claim 10 wherein the dead bolt has a second notch within the first notch that interacts with the cam finger.

Claim 13 (Previously presented): The storm door mortise lock of claim 12 wherein the second notch has a closed end that prevents the cam finger from passing into a lockout situation.

Claim 14 (Previously presented): The storm door mortise lock of claim 12 wherein the second notch has a lock indent that is approximately perpendicular to the cam finger when the dead bolt is in a locked position that prevents unintentional closing of the dead bolt.

Claim 15 (Previously presented): The storm door mortise lock of claim 12 wherein the second notch has an unlock indent that is approximately perpendicular to the cam finger when the dead bolt is in an unlocked position that prevent unintentional opening of the dead bolt.

Claims 16-29 (Cancelled)

Claim 30 (Currently amended): A storm door including a mortise lock, the storm door comprising: a door body having opposite faces and an edge, wherein the edge has a mortise formed therein; a key cylinder operatively connected to a mortise lock; the mortise lock inserted into the mortise, the mortise lock having:

spaced apart side plates;

a cam having an orifice engaging a first spindle operatively connected to the key cylinder, the cam being rotatably secured between the side plates and including a cam body and a cam ~~arm~~-finger wherein the cam body has converging first and second flat surfaces defining an over-center point;

a dead bolt mounted intermediate the side plates and being moveable by the cam between a locked position and an unlocked position, to receive the cam;

a live bolt slidably mounted intermediate the side plates and actuated between an extended and retracted position; ~~and~~

the cam having a pivot axis spaced from the dead bolt;

a spring outside the dead bolt that engages the first and second flat surface of the cam and biases the dead bolt towards the locked and unlocked positions, respectively;

a handle on each face of the door to actuate the live bolt;

the dead bolt having a notch therein and the cam finger extending into the dead bolt notch; and
the notch having a lip to prevent the finger from pivoting out of the notch into a lockout situation.

Claim 31 (Previously presented): The storm door of claim 30 wherein the dead bolt has a notch therein and the cam arm has a finger attached to the arm and extending into the dead bolt notch.

Claim 32 (Original): The storm door of claim 31 wherein the notch has a first portion which permits rotation of the cam arm.

Claims 33-35 (Cancelled)

Claim 36 (Currently amended): The storm door of claim ~~35~~ 30 wherein the ~~second portion notch~~ has a lock indent that is approximately perpendicular to the cam finger when the dead bolt is in locked position.

Claim 37 (Currently amended): The storm door of claim ~~35~~ 30 wherein the ~~second portion notch~~ has an unlock indent that is approximately perpendicular to the cam finger when the dead bolt is in an unlocked position.

Claim 38 (Previously presented): The storm door of claim 30 further comprising first and second escutcheon plates, the first spindle being between the first and second escutcheon plates, the key cylinder operatively linked to the first spindle, and a thumb turn operatively linked to the key cylinder by the first spindle.

Claim 39 (Previously presented): The storm door of claim 38 wherein the key cylinder, cam and thumb turn are operatively linked so that the length of the first spindle can be altered to allow the lock to be placed in a door body of varying thickness.

Claim 40 (Previously presented): The storm door of claim 39 wherein the first spindle is operatively linked to the cam by fitting through a hole in the cam.

Claims 41-45 (Cancelled).